

Ser. No. 10/695,661 - 1 -
Response to Office Action of February 6, 2008
Atty Docket 117163.00094

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Czygan	Examiner:	Reidel, J. L.
Serial No.:	10/695,661	Art Unit:	3766
Filed:	28 October 2003	Date:	02 April 2008
For:	STIMULATION DEVICE WITH STIMULATION OUTCOME MONITORING		

RESPONSE TO OFFICE ACTION

This letter is responsive to the Office Action mailed 06 February 2008, so no extension of time is believed to be due in making this response. No fees are believed to be due for excess claims. Please charge any additional fee or fee deficiency to Deposit Account 15-0450.

This response is made under the revisions to 37 CFR 1.121, mandatory from 30 July 2003.

The response has the following parts:

Amendments to the Specification – none made;
Amendments to the Claims – beginning on page 2;
Amendments to the Drawings – none made; and
Remarks – beginning on page 11.

DO NOT ENTER: /J.R./

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FROM: David Muzilla
DATE: April 16, 2008
SUBJECT: U.S. Patent No. 10/695,661 – Revised Proposed Amendments to the Claims

Number of Pages 3
(including this page)

HLP Reference Number: 117163.00094

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To
Examiner Reidel
U.S. Patent and Trademark
Office

Fax
(571) 273-2129

Senders Comments:

Attached please find my revised, proposed amendments as we discussed earlier today. Please contact me if you have any questions.

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Proposed Amendments Faxed to
the Examiner for consideration
in view of discussion during
Interview -- DO NOT ENTER -- /J.R./

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Proposed Amendments Faxed to the
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AMENDMENTS TO THE CLAIMS ENTER -- /J.R./

Please amend the claims as they currently stand so that they are in accord with the
following listing of the claims:

1. (proposed Examiner's amendment): A device for delivering electrical stimulation pulses
to body tissue through a stimulation electrode, comprising:

energy storage means for providing electrical stimulation energy to the stimulation
electrode from an energy source;

a first switch with which the energy storage means is switchably connected to the energy
source for charging the energy storage means;

an electrode connection for connecting the stimulation electrode to the device for
delivering electrical stimulation pulses to the body tissue;

a second switch with which the energy storage means is switchably connected to the
electrode connection for the delivery of a stimulation pulse;

means for monitoring stimulation outcome during a time interval being between 0
milliseconds and 10 milliseconds after said delivery of a stimulation pulse, wherein said means
for monitoring stimulation outcome does not use active measurement pulses from an active
current source or an active voltage source;

a short-circuit switch with which the electrode connection, after delivery of the
stimulation pulse, is switchably and at least indirectly connected to a ground potential such that,
in the case of a connected and implanted electrode, a capacitance can be discharged by way of
the body tissue wherein the capacitance includes at least one Helmholtz capacitance produced on
the surface of the stimulation electrode in conjunction with surrounding body fluid or the body
tissue; and

a control unit which is connected to at least the first switch, the second switch, and the
short-circuit switch for switching the respective switches and which is adapted to separate the

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Proposed Amendments Faxed to
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Interview -- DO NOT ENTER -- /J.R./

electrode connection from the energy storage means after delivery of the stimulation pulse and at least indirectly connect the electrode connection to the ground potential;

wherein the means for monitoring stimulation outcome, ~~between 0 milliseconds and 10 milliseconds after delivery of a stimulation pulse,~~ during said time interval is connected to the electrode connection and is adapted to detect a drop in a voltage ~~over-time~~ during said time interval at the capacitance or a rise in a short-circuit current ~~over-time~~ during said time interval at the capacitance, said drop in voltage or said rise in short-circuit current being representative of a characteristic drop in a myocardium impedance of said body tissue indicating stimulation success.

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2. (cancelled):

3. (previously presented): The device of claim 1, wherein:

the capacitance further comprises a coupling capacitor that is connected between the electrode connection and the ground potential when the short-circuit switch is closed.

4. (previously presented): The device of claim 3, wherein:

the coupling capacitor is arranged between the energy storage means and the electrode connection in such a way that the coupling capacitor is connected in series with the energy storage means when the second switch is closed.

5. (previously presented): The device of claim 4, wherein:

the means for monitoring stimulation outcome is arranged and adapted to detect the voltage at the coupling capacitor.

6. – 7. (cancelled):

8. (previously presented): The device of claim 3, wherein:

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